

**appropriate fee**, the Applicants submit the following arguments to rebut the instant rejections.

**DISCLOSURE UNDER 37 CFR §§ 1.97 AND 1.98:**

The Applicants hereby submit an Information Disclosure Statement to comply with 37 CFR § 1.98(a). As will be noted, this Information Disclosure Statement calls a number of references, which might be considered relevant, to the attention of the Office. The fact that these are in fact "Prior Art" and/or relevant to the prosecution is, however, not admitted.

**R E M A R K S**

The Applicants acknowledge the Non-Final Office Action of August 1, 2006 with appreciation. The Office indicates that Claims 11-18 are pending in the application and are presently under consideration.

**ENABLEMENT UNDER 35 U.S.C. § 112, FIRST PARAGRAPH:**

The Office rejects Claims 11-18 under 35 U.S.C. § 112, first paragraph, for lack of enablement. There are various aspects to the rejection. The Office opines that the Specification is enabling for a method for treating a human or animal with 145-200 units of pure botulinum toxin; however the Office concludes that the Specification does not enable administering doses of about 2500 units and above of botulinum toxin for treating a human or animal. The Office acknowledges that the claims do not recite a particular dosage, and therefore, concludes that the claims encompass botulinum toxins administered at any dosage.

Furthermore, in view of the foregoing, the Office concludes that the Specification does not provide enablement for the treatment of cosmetic conditions, dystonia or a nervous system disorder treatable with a botulinum neurotoxin comprising administering amounts of pure toxin ranging from 2500 units and above to a human. The Office cites Gil, et al. (U.S. Patent No. 6,787,517) and Carruthers, et al. (U.S.

Patent No. 6,358,917 B1) as teaching the state of the art with regard to botulinum toxin administration to humans, at dosages greater than 2500 units. The Office opines that the art teaches administration of botulinum toxin in amounts greater than 2500 units is lethal. With this basis, the Office concludes that the instant Specification does not enable claims drawn to "treatment", as the term is defined in Webster's Dictionary, because treatment and lethal dose are contradictory. Based on this teaching, the Office concludes that the determination of the dosages the skilled artisan could administer to a patient to practice the claimed method would require undue experimentation.

The legal standard for enablement is whether one of average skill in the art could make or use the invention from the Specification disclosure, coupled with information known in the art, without undue experimentation. The current understanding in the art regarding botulinum neurotoxin therapy is extensive as botulinum neurotoxin compositions are commercially available for treating the instantly claimed conditions. This understanding is evidenced by the art of record in the instant application (see Shelley, et al.; Keen, et al.; Benedetto; Aoki; Greene, et al.; Borodic, et al.). The Specification Examples provide guidance for the treatment of individuals, which dosage is commensurate with dosages disclosed in the cited prior art for the treatment of conditions treatable with botulinum neurotoxin. Therefore, the instant methods are routine in the clinical practice of those skilled in the art. Consequently, the instant invention is enabled. Reconsideration and withdrawal of the rejection is respectfully requested.

#### **INDEFINITENESS UNDER 35 U.S.C. § 112, SECOND PARAGRAPH:**

The Office rejects Claims 11-18 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to claim with particularity. The Office is unclear as to meaning of the claim language, "wherein the neurotoxin is free of complexing proteins which naturally form complexes with botulinum neurotoxins". The Office enquires whether the term means "purified". The Office requires clarification.

The language of a claim is to be interpreted in view of the Specification disclosure. The Applicants discuss, at page 2 of the instant Specification, the various components which naturally form neurotoxin complexes, including hemagglutinins of different molecular masses, non-hemagglutinating proteins and a neurotoxin. The Specification, at page 4, last paragraph, and continuing to page 5, discloses that only pure neurotoxin, which is free from hemagglutinins and other exogenous proteins, is encompassed within the scope of the instant invention. The Applicants assert that no ambiguity exists with regard to the claim language which is directed to “neurotoxins free of complexing proteins”, which subject matter is supported by the instant description. Consequently, reconsideration and withdrawal of the instant rejection for failing to claim with particularity is respectfully requested.

Furthermore, the Applicants note that the prosecution history of this application indicates that the Office fully comprehends the meaning of the claim language, as previous rejections are based on this particular embodiment, and over which much discussion has been generated in response to the rejections.

**ANTICIPATION UNDER 35 USC § 102(b):**

Claims 16-18 are rejected under 35 U.S.C. § 102(b) as being anticipated by Green, et al., (Movement Disorders, Vol. 8, No. 4, 1993, p. 479-483). The Office alleges that Green, et al. teach a method of treating subjects with torticollis, and immunity to botulinum toxin type A, with botulinum toxin type F. The Office considers the instant claim limitation to neurotoxins “wherein the neurotoxin or mixture of neurotoxins is free of complexing proteins which naturally form complexes with botulinum neurotoxins” to mean “purified”. Consequently, the Office concludes that Greene, et al. anticipate the instant invention because Greene, et al. teach that the botulinum toxin type F was purified (page 480).

The Greene, et al. disclosure pertains to the use of botulinum type F toxin complex as a replacement for botulinum type A toxin complex in patients who have developed neutralizing antibodies to type A toxin complex. The cited reference does not disclose a botulinum neurotoxin which is free of the complexing proteins which

naturally form complexes with botulinum neurotoxins, as recited in the generic claim and explained in the Specification. Although the Office identifies a statement in Greene, et al. that the botulinum toxin F is “purified”, the term as in Greene, et al. is not defined as botulinum neurotoxins which are “free from complexing proteins” as instantly claimed. Written description of a neurotoxin, free from complexing proteins, i.e. hemagglutinins, is absent in Greene, et al., and the Office may not infer disclosure into the reference. Consequently, the rejection for anticipation is not supported by the reference disclosure. Reconsideration and withdrawal of the rejection is respectfully solicited.

#### **OBVIOUSNESS UNDER 35 USC § 103:**

The Office rejects Claims 11-12 and 14-15 under 35 U.S.C. § 103(a) as being obvious over the disclosure of Greene, et al. in view of Carruthers, et al. (Basic and Clinical Dermatology, Marcel Dekker, Inc., New York, Chapter 11, pages 207-236). The Office indicates that Green, et al. teach a method of treating subjects with torticollis, and immunity to botulinum toxin type A complex, with botulinum toxin type F complex. The Office cites Carruthers, et al. for disclosing cosmetic treatment with botulinum toxin type A complex and suggesting that other botulinum neurotoxins can be used as alternative treatments for individuals who have developed antibodies to botulinum toxin type A complex and no longer respond to treatment.

The Applicants submit that the cited art do not teach or suggest all of the instant claim limitations, which is a requirement for a finding of *prima facie* obviousness. As discussed previously, Greene, et al. do not disclose or suggest a neurotoxin which is free from complexing proteins, as recited in the instant claims. Furthermore, the Applicants note that Carruthers, et al. do not disclose or suggest a neurotoxin, free from complexing proteins. Consequently, the Office rejection for *prima facie* obviousness is not literally made out.

Moving on, the Office rejects Claim 13 under 35 U.S.C. § 103(a) as being obvious over the disclosure of Greene, et al. in view of Carruthers, et al. and further in view of Shelley, et al. The Office basis for the rejection is as stated above, with Shelley,

et al. being cited for specifically teaching botulinum therapy for hyperhidrosis as in instant Claim 13.

The obviousness rejection of Claim 13 fails for the reasons discussed previously, in that the cited art do not disclose, nor suggest, administering a botulinum neurotoxin which is free of the complexing proteins which naturally form complexes with botulinum neurotoxins, as recited in the instant claims. In light of these remarks, the Applicants submit the Office has not established a *prima facie* basis for rejecting the claims for obviousness. Reconsideration and withdrawal of the rejection is respectfully requested.

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Accordingly, entry of the Response and Information Disclosure Statement, reconsideration of all grounds of objection and rejection, withdrawal thereof, and passage of this application to issue are all hereby respectfully solicited.

It should be apparent that the undersigned attorney has made an earnest effort to place this application into condition for immediate allowance. If he can be of assistance to the Examiner in the elimination of any possibly-outstanding insignificant impediment to an immediate allowance, the Examiner is respectfully invited to call him at his below-listed number for such purpose.

Allowance is solicited.

Respectfully submitted,

THE FIRM OF HUESCHEN AND SAGE

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Enclosure: Extension of time under 37 CFR § 1.17(a)(3), three (3) months, and  
fee (\$1020.00); Information Disclosure Statement, two (2) pages, and  
fee (\$180.00); Accompanying References and Postal Card Receipt.

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**THE COMMISSIONER IS HEREBY AUTHORIZED TO CHARGE ANY FURTHER  
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